

Amendments to the Claims:

This listing of claims replaces all prior listings, and prior versions, of the claims.

Listing of Claims:

1. (original) A position referencing system comprising:
 a plurality of spaced apart color elements attached to a static structure;
 means attached to a movable structure for detecting one of said spaced apart color elements; and
 means for determining a position of said movable structure from said detected color element.
2. (currently amended) A position ~~reference~~ referencing system according to claim 1, wherein said static structure is an elevator hoistway and said movable structure is an elevator car.
3. (original) A position referencing system according to claim 2, wherein said detecting means comprises at least one camera for determining the color of said detected color element and for detecting a top edge and a bottom edge of said detected color element.
4. (original) A position referencing system according to claim 3, wherein each said color element reflects a unique wavelength of the electromagnetic spectrum.
5. (original) A position referencing system according to claim 3, wherein said at least one camera is mounted to a

side of said elevator car, said static structure is a door frame in said hoistway, and said plurality of spaced apart color elements comprises a plurality of differently colored elements attached to said door frame.

6. (original) A position referencing system according to claim 3, wherein said detecting means detects a plurality of unique color components of said detected color element and said determining means selects one of said plurality of unique color components as a positioning color, normalizes the remaining ones of said plurality of unique color components with respect to the positioning color, determines a decoded number for the detected color element from said normalized ones of said plurality of unique color components, and identifies the detected color element from the decoded number.

7. (original) A position referencing system according to claim 3, wherein said detecting means further comprises a linear radiation source for illuminating said detected one of said color elements and a camera apparatus.

8. (original) A position referencing system according to claim 7, wherein said camera apparatus comprises a CCD camera.

9. (original) A position referencing system according to claim 8, wherein said CCD camera comprises a CCD sensor, lens, and light guide.

10. (original) A position referencing system according to claim 3, wherein said detecting means comprises a first camera apparatus attached to a first part of said elevator car and a second camera apparatus attached to a second part of said elevator car and wherein said first and second camera apparatus operate independently to provide redundant speed and position information.

11. (original) A position referencing system according to claim 1, wherein said static structure is a transport guideway and said movable structure is a passenger cab.

12. (currently amended) A position referencing system ~~according to claim 11, wherein~~ comprising:

a plurality of spaced apart color elements attached to a static structure;

means attached to a movable structure for detecting one of said spaced apart color elements;

means for determining a position of said movable structure from said detected color element;

said static structure being a transport guideway and said movable structure being a passenger cab; and

said detecting means ~~comprises~~ comprising at least one camera for determining the color of said detected color element and for detecting a top edge and a bottom edge of said detected color element.

13. (original) A position referencing system according to claim 12, wherein said color element reflects a unique wavelength of the electromagnetic spectrum.

14. (original) A position referencing system according to claim 12, wherein said at least one camera is mounted to a side of said passenger cab, said static structure is a door frame in said transport guideway, and said plurality of spaced apart color elements comprises a plurality of differently colored elements attached to said door frame.

15. (original) A position referencing system according to claim 12, wherein said detecting means detects a plurality of unique color contents of said detected color element and said determining means selects one of said plurality of unique color components as a positioning color, normalizes the remaining ones of said plurality of unique color components with respect to the positioning color, determines a decoded number for the detected color element from said normalized ones of said plurality of unique color components, and identifies the detected color element from the decoded number.

16. (original) A position referencing system according to claim 12, wherein said detecting means comprises a linear radiation source for illuminating said detected one of said color elements and a camera apparatus.

17. (currently amended) A ~~passenger-transport~~ position referencing system according to claim 16, wherein said camera apparatus comprises a CCD camera.

18. (currently amended) A ~~passenger-transport~~ position referencing system according to claim 17, wherein said CCD camera comprises a CCD sensor, lens, and light guide.

19. (currently amended) A ~~passenger transport~~ position referencing system according to claim 12, wherein said detecting means comprises a first camera apparatus attached to a first part of said passenger cab and a second camera apparatus attached to a second part of said passenger cab and wherein said first and second camera apparatus operate independently to provide redundant speed and position information.

20. (original) A method for determining the position of a movable structure comprising the steps of:

attaching a plurality of spaced apart color elements to a static structure;

detecting one of said spaced apart color elements using a sensing device attached to said movable structure; and

determining a position of said movable structure from said detected color element.

21. (original) A method according to claim 20, wherein said detecting step comprises illuminating said color element with a radiation source and capturing a reflected image with a sensing device.

22. (original) A method according to claim 20, wherein said detecting step comprises capturing a reflected color light image containing a plurality of primary colors and said determining step comprises selecting one of said primary colors as a positioning color and normalizing the remaining colors with respect to said positioning color.

23. (original) A method according to claim 22, wherein said position determining step comprises determining a decode number for said color element and from said decode number identifying said color element and determining the position of said moveable structure.